

PTO/SB/08A (04-03)

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

of 1

Complete if Known

Application Number	10/618,645
Filing Date	15 July 2003
First Named Inventor	John G. Leishman, et al.
Art Unit	3745
Examiner Name	-
Attorney Docket Number	MR2833-27

U. S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

Examiner
Signature

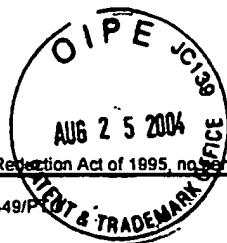
Date Considered

11/15/04

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Substitute for form 1449/PTO

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INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

1 of 4

Application Number 10/618,645

Filing Date 15 JULY 2003

First Named Inventor JOHN G. LEISHMAN

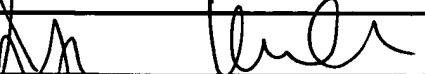
Art Unit 3745

Examiner Name UNKNOWN

Attorney Docket Number MR2833-27

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
JK	AA	Leishman, J.G., and Bagai, A., "Challenges in Understanding the Vortex Dynamics of Helicopter Rotor Wakes," AIAA Journal, Vol. 36, No. 7, July 1998, pp. 1130-1140.	
	AB	Leishman, J.G., Principles of Helicopter Aerodynamics, Cambridge University Press, 2000, Chapter 10.	
	AC	Schmitz, F.H., "Rotor Noise," Chapter 2, Aeroacoustics of Flight Vehicles: Theory and Practice, Vol. 1, NASA Reference Publication 1258, Aug. 1991.	
	AD	Berry, J.D., and Mineck, R.E., "Wind Tunnel Test for an Articulated Helicopter Rotor Model with Several Tip Shapes," NASA-TM-80080, December, 1980.	
	AE	Martin, P.B. and Leishman, J.G., "Trailing Vortex Measurements in the Wake of a Hovering Rotor Blade with Various Tip Shapes," Proceedings of the 58th Annual Forum of the	
	AF	Tangler, J.L., "Experimental Investigation of the Sub-wing Tip and Its Vortex Structure," NASA CR-3058, 1978.	
	AG	Marchman, J.F. III, and Uzel, J.N., "Effect of Several Wing Tip Modifications on a Trailing Vortex," Journal of Aircraft, Vol. 9, No. 9, 1972, pp. 684-686.	
	AH	McAlister, K.W., Tung, C., and Heineck, J.T., "Devices that Alter the Tip Vortex of a Rotor," NASA/TM-2001-209625 (AFDD/TR-01-A-003), 2001.	
	AI	Kantha, H.L., Lewellen, W.S., and Durgin, F.H., "Response of a Trailing Vortex to Axial Injection into the Core," Journal of Aircraft, Vol. 9, No. 3, 1972, pp. 254-256.	
↓	AJ	Liu, Z., Russel, J.W. and Sankar, L.N., "A study of Rotor Tip Structure Alteration Technique," Journal of Aircraft, Vol. 38, No. 3, 2001, pp. 473- 477.	

Examiner Signature		Date Considered	15/04
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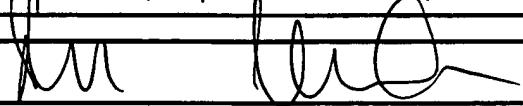
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Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>		Complete If Known	
		Application Number	10/618,645
		Filing Date	15 JULY 2003
		First Named Inventor	JOHN G. LEISHMAN
		Art Unit	3745
		Examiner Name	UNKNOWN
Sheet	2	of	4
		Attorney Docket Number	
		MR2833-27	

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
✓	AK	Han, Y.O., and Bae, H., "Modification of the Tip Vortex by Span-wise Slots," KSAS Korean Journal, Vol. 27, No. 5, 1998, pp. 1-7.	✓
	AL	Han, Y.O., and Chung, W.J., "Mean and Turbulent Characteristics of Tip Vortices Generated by a Slotted Model Blade," Proceedings of 5th Engineering Turbulence Modeling	✓
	AM	Martin, P.B., Bhagwat, M.J., and Leishman, J.G., "Strobed Laser-Sheet Visualization of a Helicopter Rotor Wake," 2nd Pacific Symposium on Flow Visualization and Image Pro	
	AN	Bhagwat, M.J., and Leishman, J.G., "Stability Analysis of Rotor Wakes in Axial Flight," Journal of the American Helicopter Society, Vol. 45, No. 3, 2000, pp. 165-178.	
	AO	Leishman, J.G., "Seed Particle Dynamics in Tip Vortex Flow," Journal of Aircraft, Vol. 33, No. 4, 1996, pp. 823-825.	
	AP	Martin, P.B., Pugliese, G.J., and Leishman, J.G., "Laser Doppler Velocimetry Uncertainty Analysis For Rotor Blade Tip Vortex Measurements," AIAA CP 2000-0263, 38th Ae	
	AQ	Barrett, R.V., and Swales, C., "Realisation of the Full Potential of the Laser Doppler Anemometer in the Analysis of Complex Flows," Aeronautical Journal, Vol. 102, No. 1	✓
	AR	Tung, C., Caradonna, F.X., and Morse, H.A., "The Structure of Trailing Vortices Generated by Model Rotor Blades," Vertica, Vol. 7, 1983, pp. 33- 43.	
	AS	Tennekes, H, and Lumley, J.L., A First Course in Turbulence, MIT Press, 1972.	
↓	AT	Vatistas, G.H., Kozel, V., and Mih, W.C., "Simpler Model for Concentrated Vortices," Experiments in Fluids, Vol. 24, No. 11, 1991, pp. 73-76.	

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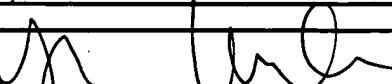
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		Filing Date	15 JULY 2003
		First Named Inventor	JOHN G. LEISHMAN
		Art Unit	3745
Examiner Name	UNKNOWN		
Sheet	3	of	4
		Attorney Docket Number	MR2833-27

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JK	AU	Lamb, H., Hydrodynamics, 6th Ed. Cambridge University Press, Cambridge, UK, 1932.		
	AV	Oseen, C.W., "Uber Wirbelbewegung in Einer Reiben den Flussigkeit," Ark. J. Mat. Astrom. Fys., Vol. 7, 1912, pp. 14-21.		
	AW	Bhagwat, M.J., and Leishman, J.G., "Viscous Vortex Core Models for Free-Vortex Wake Calculations," Proceedings of the 58th Annual Forum of the American Helicopter Societ		
	AX	Bhagwat, M.J., and Leishman, J.G., "Correlation of Helicopter Rotor Tip Vortex Measurements," AIAA Journal, Vol. 38, No. 2, 2000, pp. 301-308.		
	AY	Squire, H.B., "The Growth of a Vortex in Turbulent Flow," The Aeronautical Quarterly, August 1965, pp. 302-305.		
	AZ	Cotel, A.J., and Breidenthal, R.E., "Turbulence Inside a Vortex," Physics of Fluids, Vol. 11, No. 10, 1999, pp. 3026-3029.		
	BA	Bradshaw, P., "The analogy Between Streamline Curvature and Bouyancy in Turbulent Shear Flows," Journal of Fluid Mechanics, Vol. 36, Part 1, pp. 177-191.		
	BB	Iverson, J.D., "Correlation of Turbulent Trailing Vortex Decay Data," Journal of Aircraft, Vol. 13, No. 3, 1976, pp. 338-342.		
	BC	Devenport, W.J., Rife, M.C., Liapis, S.I., and Follin, G.J., "The Structure and Development of a Wing-Tip Vortex," Journal of Fluid Mechanics, Vol. 312, 1996, pp. 67-106.		
	BD	Leishman, J.G., "Measurements of the Aperiodic Wake of a hovering Rotor," Experiments in Fluids, Vol. 25, 1998, pp. 352-361.		

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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of

Application Number 10/210,615

Filing Date 15 JULY 2003

First Named Inventor JOHN C. LEISHMAN

Art Unit 3745

Examiner Name **UNKNOWN**

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
JL	BE	Gursul, I., and Xie, W., "Origin of Vortex Wandering Over Delta Wings," Journal of Aircraft, Vol. 37, No. 2, 1999, pp. 348-350.	

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